

CLAIMS

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3 1. A method including steps of
4 receiving, at a server, a request from a client for an object accessible by said
5 server;
6 building, logically remote to said server, a set of template information for said ob-
7 ject;
8 sending, to said client, a set of delta information for said object and a reference to
9 said template information.

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11 2. A method as in claim 1, including steps of compressing said delta infor-
12 mation.

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14 3. A method as in claim 1, including steps of compressing said template in-
15 formation.

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17 4. A method as in claim 1, including steps of
18 computing, responsive to said object from said server, a set of delta information;
19 and
20 formatting said delta information for delivery to said client.

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22 5. A method as in claim 1, including steps of

1 distributing said request from said client to a selected one of a set of delta encod-
2 ers;
3 providing a web object at said server in response to said request; and
4 computing said delta information at said selected one delta encoder in response to
5 said template information, wherein said template information is substantially independent of an
6 identity of said selected one delta encoder.
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8 6. A method as in claim 1, including steps of
9 distributing said request from said client to a selected one of a set of devices;
10 providing a web object at said selected one device in response to said request;
11 computing said delta information in response to said web object and in response
12 to said template information, wherein said template information is substantially independent of
13 an identity of said selected one device.
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15 7. A method as in claim 1, including steps of
16 receiving, from said client, a request for said template information; and
17 sending, to said client, said template information.
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19 8. A method as in claim 1, including steps of
20 sending, from a source of said delta information, a request for said template in-
21 formation; and
22 receiving, at said source of said delta information, said template information.
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1 9. A method as in claim 1, wherein said delta information includes at least
2 one program fragment.

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4 10. A method as in claim 1, wherein said delta information includes at least
5 one program fragment directing said client to retrieve template information.

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7 11. A method as in claim 10, wherein said at least one program fragment di-
8 rects said client to retrieve said template information from either the template builder, the delta
9 encoder, or a CDN.

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11 12. A method as in claim 1, wherein
12 said object is accessible to more than one said server; and
13 said template information is accessible to said more than one said server.

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15 13. A method as in claim 1, wherein said steps of building are responsive to at
16 least one change in said object.

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18 14. Apparatus including
19 a server responsive to requests from at least one client, said requests identifying
20 objects accessible by said server;
21 a template builder disposed logically remote to said server and responsive to said
22 objects;

1 a delta encoder responsive to said objects and generating responses to said re-
2 quests, said responses including delta information for said objects and references to template in-
3 formation for said objects.

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5 15. Apparatus as in claim 14, including a delta information compressor.

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7 16. Apparatus as in claim 14, including a distributor responsive to said request
8 from said client and coupled to a selected one of a set of delta encoders, wherein said template
9 information is substantially independent of an identity of said selected one delta encoder.

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11 17. Apparatus as in claim 14, including a distributor responsive to said request
12 from said client and coupled to a selected one of a set of devices, wherein said template informa-
13 tion is substantially independent of an identity of said selected one device.

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15 18. Apparatus as in claim 14, including a server for said template information.

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17 19. Apparatus as in claim 14, including a template information compressor.

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19 20. Apparatus as in claim 14, wherein said delta encoder generates requests to
20 and receives responses from said template builder.

1 21. Apparatus as in claim 14, wherein said delta encoder sends statistical in-
2 formation to said template builder, wherein said statistical information relates to the benefits of
3 the delta caching service.

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5 22. Apparatus as in claim 14, wherein said delta encoder retrieves configura-
6 tion information from said template builder and uses said configuration information in a hosted
7 configuration mechanism.

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9 23. Apparatus as in claim 14, wherein said delta encoder retrieves a list of
10 available templates and identifies which templates are not included in said list.

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12 24. Apparatus as in claim 14, wherein said delta encoder requests said tem-
13 plate builder to rebuild a template.

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15 25. Apparatus as in claim 14, wherein said delta information includes at least
16 one program fragment.

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18 26. Apparatus as in claim 14, wherein said delta information includes at least
19 one program fragment directing said client to retrieve template information.

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21 27. Apparatus as in claim 14, wherein
22 said object is accessible to more than one said server; and
23 said template information is accessible to said more than one said server.

1 28. Apparatus as in claim 14, wherein said template builder is responsive to at
2 least one change in said object.

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4 29. Apparatus including
5 means for receiving, at a server, a request from a client for an object accessible by
6 said server;
7 means for building, logically remote to said server, a set of template information
8 for said object;
9 means for sending, to said client, a set of delta information for said object and a
10 reference to said template information.

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12 30. Apparatus as in claim 29, including means for compressing said delta in-
13 formation.

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15 31. Apparatus as in claim 29, including means for compressing said template
16 information.

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18 32. Apparatus as in claim 29, including
19 means for computing, responsive to said object from said server, a set of delta in-
20 formation; and
21 means for formatting said delta information for delivery to said client.

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23 33. Apparatus as in claim 29, including

1 means for distributing said request from said client to a selected one of a set of
2 delta encoders;
3 means for providing a web object at said server in response to said request; and
4 means for computing said delta information at said selected one delta encoder in
5 response to said template information, wherein said template information is substantially inde-
6 pendent of an identity of said selected one delta encoder.
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8 34. Apparatus as in claim 29, including

9 means for distributing said request from said client to a selected one of a set of
10 devices;
11 means for providing a web object at said selected one device in response to said
12 request;
13 means for computing said delta information in response to said web object and in
14 response to said template information, wherein said template information is substantially inde-
15 pendent of an identity of said selected one device.
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17 35. Apparatus as in claim 29, including

18 means for receiving, from said client, a request for said template information; and
19 means for sending, to said client, said template information.
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21 36. Apparatus as in claim 29, including

22 means for sending, from a source of said delta information, a request for said
23 template information; and

1 means for receiving, at said source of said delta information, said template infor-
2 mation.

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4 37. Apparatus as in claim 29, wherein said delta information includes at least
5 one program fragment.

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7 38. Apparatus as in claim 29, wherein said delta information includes at least
8 one program fragment directing said client to retrieve template information.

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39. Apparatus as in claim 29, wherein

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said object is accessible to more than one said server; and

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said template information is accessible to said more than one said server.

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40. Apparatus as in claim 29, wherein said means for building is responsive to

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at least one change in said object.

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